

CLAIMS

1. A pharmaceutical composition comprising an adequate pharmaceutical carrier or diluent and a sufficient amount of an element selected from the group consisting of the apolipoprotein L-I, a pharmaceutical active fragment thereof, a polynucleotide encoding said polypeptide, a cell transformed by said polynucleotide or an inhibitor directed against said apolipoprotein L-I.
2. The pharmaceutical composition according to claim 1, wherein the apolipoprotein L-I is the human apolipoprotein L-I corresponding to the sequence SEQ.ID.N°1 or an homologue polypeptide.
3. The pharmaceutical composition of claim 2, wherein the fragment of the human apolipoprotein L-I is selected from the group consisting of the sequence starting from the amino acid 1 up to the amino acid 342, the sequence starting from the amino acid 343 to the amino acid 398, the sequence starting from the amino acid 340 up to the amino acid 362 and the sequence starting from the amino acid 356 up to the amino acid 398 of the human polypeptide apolipoprotein sequence SEQ.ID.N° 1.
4. The pharmaceutical composition according to claim 1, wherein the inhibitor directed against apolipoprotein L-I is the trypanosoma polypeptide SRA or a pharmaceutical active fragment thereof or any molecule which mimic the interaction between the polypeptide SRA and the apolipoprotein L-I.
5. The pharmaceutical composition according to claim 4, wherein the pharmaceutical active fragment of the Trypanosoma polypeptide SRA is the fragment of said polypeptide, which interacts specifically with apolipoprotein L-I.

6. The pharmaceutical composition according to claim 4, wherein the molecule which mimic the interaction between the polypeptide SRA and the apolipoprotein L-I is an antibody (or a hyper variable
5 portion thereof) directed against apolipoprotein L-I, preferably, an antibody (or a hyper variable portion thereof) directed against the terminal fragment of apolipoprotein L-I, which interacts with the Trypanosoma polypeptide SRA.

10 7. The pharmaceutical composition according to claim 1, wherein the inhibitor is an anti-idiotypic antibody or a hyper variable portion thereof directed against the anti-apolipoprotein L-I antibody (or a hyper variable portion thereof).

15 8. Use of the pharmaceutical composition according to any of the preceding claims 1 to 7, for the manufacture of a medicament for the treatment and/or the prevention of diseases induced in mammals (including the human) by Trypanosoma, especially African Trypanosoma.

20 9. Use according to claim 8, wherein the Trypanosoma are selected from the group consisting of *Trypanosoma brucei brucei*, *Trypanosoma brucei rhodesiense* and *Trypanosoma gambiense*.

25 10. Use according to claim 8 or 9 for the treatment of Nagana induced in bovidae by *Trypanosoma brucei brucei*.

30 11. A diagnostic kit comprising an element selected from the group consisting of the apolipoprotein L-I, a fragment thereof, a polynucleotide encoding said apolipoprotein L-I or an inhibitor directed against said apolipoprotein.

12. The diagnostic kit of claim 11, wherein the apolipoprotein L-I is the human apolipoprotein L-I or an homologue polypeptide.

13. The diagnostic kit according to claim 11 or 12, wherein said inhibitor is the trypanosoma polypeptide SRA or a fragment thereof which interacts with said apolipoprotein L-I or an antibody (or a hyper variable
5 portion thereof) directed against said apolipoprotein L-I.

14. A non-human genetically modified mammal which is expressing a polynucleotide encoding the apolipoprotein L-I (preferably the human polypeptide apolipoprotein L-I or an homologue of said polypeptide) or
10 an active pharmaceutical fragment thereof and wherein the mammal is resistant or tolerant to diseases induced by Trypanosoma, especially *Trypanosoma brucei brucei* (Nagana).

15. The mammal according to claim 14 which is a genetically modified bovidae.

16. The mammal according to claim 14 or 15, wherein the pharmaceutical active fragment of apolipoprotein is the sequence starting from the amino acid 1 up to the amino acid 342.

17. A solid support such as a chromatographic
20 column comprising, bound to the surface of said solid support, an inhibitor (preferably an antibody, the SRA polypeptide or a fragment thereof) directed against the apolipoprotein L-I and used for the recovery of said apolipoprotein L-I from a mammal, preferably a human body
25 sample.

18. A method for the recovering of apolipoprotein L-I polypeptide from a mammal, preferably a human body sample (such as human serum), said method comprising the steps of:

- 30 - putting into contact said sample with the solid support of claim 17,
- eluting the contaminant of said sample and the apolipoprotein L-I bound to the inhibitor.